





DATE MAILED: 07/31/2002

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/471,447	12/23/1999	ROBERT BEDICHEK	TRANS18	7416	
7	590 07/31/2002				
STEPHEN L KING			EXAMINER		
30 SWEETBAY ROAD RANCHO PALOS VERDES, CA 90275		MAK	MAKHDOOM,	HDOOM, SAMARINA	
			ART UNIT	PAPER NUMBER	
			2122		

Please find below and/or attached an Office communication concerning this application or proceeding.

			4			
•	Application No.	Applicant(s)	0			
Office Action Summers	09/471,447	BEDICHEK ET AL.				
Office Action Summary	Examiner	Art Unit				
TI MAU DIO DATE Afabia agreementation and	Samarina Makhdoom	2123				
The MAILING DATE of this communication app Period for Reply	ears on the cover siles	et with the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may within the statutory minimum of will apply and will expire SIX (6) and cause the application to becore	ay a reply be timely filed of thirty (30) days will be considered timely. MONTHS from the mailing date of this communication. ne ABANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 23 i	December 1999 .					
2a) This action is FINAL . 2b) ⊠ Th	is action is non-final.					
3) Since this application is in condition for allow						
closed in accordance with the practice under Disposition of Claims	Ex parte Quayle, 193	6 G.D. 11, 453 O.G. 213.				
4) Claim(s) 1-14 is/are pending in the application	٦.					
4a) Of the above claim(s) is/are withdra	wn from consideration					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/c	or election requirement					
9) The specification is objected to by the Examine	ar					
10) The drawing(s) filed on is/are: a) acce		by the Evaminer				
Applicant may not request that any objection to the	•					
11) The proposed drawing correction filed on	- · · ·	, -				
If approved, corrected drawings are required in re		,				
12) ☐ The oath or declaration is objected to by the Ex	caminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreig	n priority under 35 U.S	.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
 Certified copies of the priority documents have been received. 						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	•					
 14) ☐ Acknowledgment is made of a claim for domest a) ☐ The translation of the foreign language presented. 	•	•				
15) Acknowledgment is made of a claim for domes	• •					
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notic	view Summary (PTO-413) Paper No(s) ce of Informal Patent Application (PTO-152) r:				

Art Unit: 2123

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by de Nicolas et al. U.S. Patent No. 5,167,023.

As per Claims 1 and 8, de Nicolas et al. recite translating an instruction set from a target computer to the host computer and validating the translation by testing the memory address and executing the translation or generating an exception based on the test. See Col. 5, lines 38-46 and Col. 12, lines 48-53.

As per Claims 2 and 9, de Nicolas et al. disclose the step of testing a memory address of the translated instruction in a process separate from translating the target instruction. See Col 5, lines 59-63 and Col. 6, lines 1-7

As per Claims 3 and 10, de Nicolas et al. disclose the step testing the memory address of a target instruction as part of the translation of the target instruction. See Col. 6, lines 1-5.

As per Claims 4 and 11, de Nicolas et al. disclose the step of copying a memory address of a target instruction and linking it to an earlier translation. See Col. 12, lines 19-25.

As per Claims 5 and 12, de Nicolas et al. disclose the step copying and storing the memory address of the target instruction. See Col. 13, lines 38-43.

Art Unit: 2123

As per Claims 6 and 13, de Nicolas et al. disclose the step of translating without testing the memory address of the target instruction if the test can be safely eliminated. See Col. 13, 45-50.

As per Claims 7 and 14, de Nicolas et al. disclose the step of translating without testing a memory address of the target instruction if the memory address is on the same memory page.

See Col. 15, 20-31.

3. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Goettelmann et al. U.S. Patent No. 5,313,614.

As per Claims 1 and 8, Goettelmann et al. recite translating an instruction set from a target computer to the host computer and validating the translation by testing the memory address and executing the translation or generating an exception based on the test. See Col. 9, lines 43-58.

As per Claims 2 and 9, Goettelmann et al. disclose the step of testing a memory address of the translated instruction in a process separate from translating the target instruction. See Col 9, lines 58-62.

As per Claims 3 and 10, Goettelmann et al. disclose the step testing the memory address of a target instruction as part of the translation of the target instruction. See Col. 20, lines 62-66.

As per Claims 4 and 11, Goettelmann et al. disclose the step of copying a memory address of a target instruction and linking it to an earlier translation. See Col. 30, lines 6-12.

As per Claims 5 and 12, Goettelmann et al. disclose the step copying and storing the memory address of the target instruction. See Col. 14, lines 58-65.

Art Unit: 2123

As per Claims 6 and 13, Goettelmann et al. disclose the step of translating without testing the memory address of the target instruction if the test can be safely eliminated. See Col. 13, 48-56.

As per Claims 7 and 14, Goettelmann et al. disclose the step of translating without testing a memory address of the target instruction if the memory address is on the same memory page.

See Col. 13, 25-28.

4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fogg, Jr. et al. U.S. Paten No. 4,951,195.

As per Claims 1 and 8, Fogg, Jr. et al. recite translating an instruction set from a target computer to the host computer and validating the translation by testing the memory address and executing the translation or generating an exception based on the test. See Col. 8, lines 65-69 and Col. 9, lines 15-23.

As per Claims 2 and 9, Fogg, Jr. et al. disclose the step of testing a memory address of the translated instruction in a process separate from translating the target instruction. See Col 11, lines 45-55.

As per Claims 3 and 10, Fogg, Jr. et al. disclose the step testing the memory address of a target instruction as part of the translation of the target instruction. See Col. 16, lines 22-34.

As per Claims 4 and 11, Fogg, Jr. et al. disclose the step of copying a memory address of a target instruction and linking it to an earlier translation. See Col. 12, lines 15-21.

As per Claims 5 and 12, Fogg, Jr. et al. disclose the step copying and storing the memory address of the target instruction. See Col. 10, lines 10-143.

Art Unit: 2123

As per Claims 6 and 13, Fogg, Jr. et al. disclose the step of translating without testing the memory address of the target instruction if the test can be safely eliminated. See Col. 17, 1-5.

As per Claims 7 and 14, Fogg, Jr. et al. disclose the step of translating without testing a memory address of the target instruction if the memory address is on the same memory page.

See Col. 15, 56-61.

Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent 6,363,33670, Banning et al. is the applicant's own work. This patent teaches a method for determining if writes to a memory page are directed to target instructions that are translated to a host computer.
- U.S. Patent 6,415,379, Keppel et al is the applicant's own work. This patent teaches a method of maintaining translation context for instructions translated from instructions designed for a target microprocessor to run on a host processor.
- U.S. Patent 6,136,764, Dulong et al. is directed to a method and apparatus for emulating an instruction on a processor.
- U.S. Patent 5,875,318, Langford is directed to an instruction set translator for translating a source code executable by a first processor to a target code executable by a second processor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samarina Makhdoom whose telephone number is 703-305-7209. The examiner can normally be reached on Full Time.

Art Unit: 2123

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin J. Teska can be reached on 703-305-9704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

SM July 29, 2002

> DR. HUGH EXAMINER DR. HUGH EXAMINER DRATENT LINIT 2123